



**Palo Verde
Nuclear Generating Station**
P.O. Box 52034
Phoenix, AZ 85072
Mail Station 7626
Tel 623 393 6688

ID#: 291-04810-BB/MPE/PD
October 15, 2014

Mr. Todd Martin
Non-Title V Unit Manager
Maricopa County Air Quality Department
1001 N. Central Ave.
Phoenix, AZ 85004

Dear Mr. Martin:

Subject: **NOTIFICATION OF MINOR MODIFICATION TO ADD EMERGENCY
DIESEL GENERATORS - PERMIT #030132**

This Notification of Minor Modification is to provide application to MCAQD for Palo Verde Nuclear Generating Station (PVNGS) to add additional emergency diesel driven equipment.

We are proposing to add new towable generators to be permitted as stationary. The new equipment is two Cummins C150D6R 150 kilowatt generators rated at 314 bhp.

This equipment is in addition to the generators and pumps added to our permit in an application submitted to your department dated on August 7th, 2014.

Enclosed is the permit application form and supporting documentation. This change is being made in accordance with the requirements of County Rule 220 § 405 and County Rule 280 § 302.1.a.

If you have any questions please call Mr. Paul DiCiccio at (623) 393-6657, or (480) 789-1284.

Based on information and belief formed after reasonable inquiry, the statements and information in the Notification of Minor Modification and permit application update are true, accurate, and complete.

Sincerely,

Martin P. Eroh
Department Leader, Environmental

MPE/PD/hsc

Enclosures: 1) Permit Application Form
Via Hand Delivery 2) Supporting Documentation



Maricopa County

Air Quality Department

Deliver or Mail all Applications to:

MCAQD

Permit Application Intake

1001 N Central Avenue, Suite 125

Phoenix AZ 85004

AQ14004500

Air Quality Department Offices

Phone: (602) 506-6010

Web Site: <http://www.maricopa.gov/aq/>

NOTIFICATION OF MINOR MODIFICATION AT A CURRENTLY PERMITTED FACILITY

OCT 16 2014

ONE STOP SHOP

Per Rule 220, Section 405 and Section 406, this notification must be submitted for a currently permitted facility for a minor permit revision. This notification is not required for changes in work schedules or relocation of equipment for similar use within a permitted facility.

Submit this notification prior to making the modifications. If confidentiality is claimed pursuant to ARS §49-487, a fully completed application with confidential information clearly identified along with a separate copy of the application for public review without the confidential information and a written justification for the confidentiality claimed must be submitted. Complete both sides by typing or printing legibly. A filing fee of **\$200.00** must accompany your application (make checks payable to MCAQD). If the application is submitted as a result of receiving a notice of violation (NOV), an additional **\$100.00** late fee must accompany the application. Before the permit is issued, the Permittee will be billed for all permit processing time required for a billable permit action at a rate of \$145.00 per hour, adjusted annually under Department Rule 280 (Fees), §304. An annual administrative fee will also be charged per Rule 280, §302.2. For questions regarding billing, call (602) 372-1071.

BUSINESS NAME: Palo Verde Nuclear Generating Station		EXISTING <u>AIR QUALITY</u> <u>PERMIT NUMBER</u> FOR THIS SITE: 030132 - # 404912	
ADDRESS OF SITE: 5801 S. Wintersburg Rd.			
CITY: Tonopah	STATE: AZ	ZIP CODE: 85354	TELEPHONE AT SITE: (623) 393-6657
CONTACT PERSON: Paul DiCiccio			
MAILING ADDRESS: PO Box 52034			
CITY: Phoenix	STATE: AZ	ZIP CODE: 85072- 2034	TELEPHONE: (623) 393-6657
FAX: (623) 393-5442		E-MAIL: Paul.Diciccio@aps.com	

BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION IN THIS DOCUMENT ARE TRUE, ACCURATE, AND COMPLETE

DATE 10/15/14 SIGNATURE OF OWNER OR
RESPONSIBLE OFFICIAL OF BUSINESS [Signature]

TYPE OR PRINT NAME AND TITLE Brad Berryman - VP Site Operations - General Plant Manager

DO NOT WRITE IN THIS SPACE.

REVIEWED BY _____ DATE _____

☐ APPROVED

☐ DENIED

REASON FOR
DENIAL: _____

1. NARRATIVE DESCRIPTION OF THE PROPOSED MODIFICATION: Due to additional readiness requirements from the Nuclear Regulatory Commission (NRC), the Palo Verde Nuclear Generating Station will be purchasing supplementary emergency generating power
This new equipment will be placed in a building designed to hold this equipment, and will only be operated for maintenance
testing purposes, periods of emergency, and to prevent occurrences of unsafe conditions during electrical system maintenance.
Each engine is expected to run approximately three hours per year.

2. PROVIDE A LIST OF EQUIPMENT AND EMISSION CONTROL DEVICES WHICH WILL BE INSTALLED OR MODIFIED:

ASSIGNED EQUIPMENT NUMBER	DESCRIBE EACH PIECE OF EQUIPMENT INCLUDE MAKE & MODEL	DATE OF INSTALLATION OR MODIFICATION	HOW MANY	HP, KVA GALLONS OR OTHER RATING (Specify Units)	EXHAUST	
					VENT TO AIR	VENT TO CONTROL (Identify)
AEBDNG05A AEBDNG05B	Cummins 150 kW C150D6R GenSet	Sept 2014	2	314	X	

3. MATERIALS LIST: List all materials handled, stored, processed, used, mixed, treated, or emitted. Include chemicals, mixtures, resins, cleaning compounds, etc., in this list. Identify each material in sufficient detail and provide material safety data sheets (MSDS).

MATERIAL	ANNUAL USAGE OR THROUGHPUT	CHEMICAL COMPOSITION (% by weight)	EQUIPMENT NUMBER IN WHICH USED
#2 Diesel	74 gallons	100%	AEBDNG05A AEBDNG05B

4. DESCRIBE CONTROL DEVICES

TYPE OF DEVICE	NAME / ID	GAS FLOW RATE SCFM	LIQUID FLOW RATE GAL/MIN	CONTROL EFFICIENCY (% WEIGHT)

5. MATERIALS RECLAIMED OR SHIPPED AS WASTE:

IF APPLICABLE, COMPLETE THE ATTACHED SECTION Z-M.

SECTION Z-M. AIR POLLUTANT EMISSIONS

PROVIDE A SUMMARY OF THE PROJECTED ACTUAL AIR EMISSIONS ON AN ANNUAL BASIS FOR THE ENTIRE SITE IN THE FOLLOWING SUMMARY TABLES. ATTACH DETAILED CALCULATIONS TO SUPPORT THE FIGURES. **IF SUPPORTING CALCULATIONS ARE NOT INCLUDED WITH THE APPLICATION, THE APPLICATION WILL BE DEEMED INCOMPLETE.**

PROVIDE A SUMMARY OF THE ACTUAL AIR EMISSIONS ON AN ANNUAL BASIS FOR THE FOLLOWING THREE COLUMNS:

- (i) EMISSIONS TO BE RELEASED FROM ONLY THE EQUIPMENT AND AFFECTED PROCESSES DESCRIBED ON THIS NOTIFICATION
- (ii) THE ENTIRE SITE PRIOR TO THE MODIFICATION OF THE EQUIPMENT AND PROCESSES DESCRIBED IN (i) ABOVE.
- (iii) THE ENTIRE SITE INCLUDING THE EMISSIONS IDENTIFIED IN (i) ABOVE. NORMALLY, THIS COLUMN WILL BE THE SUM OF COLUMNS (i) AND (ii).

POLLUTANT	ACTUAL EMISSIONS OR PROJECTED ACTUAL EMISSIONS IN POUNDS PER YEAR		
	COLUMN (i)	COLUMN (ii)	COLUMN (iii)
CARBON MONOXIDE (CO)	10.8	24,762	24,773
OXIDES OF NITROGEN (NO _x)	6.2	94,332	94,338
OXIDES OF SULFUR (SO _x)	0.02	48	48
PARTICULATES OF 10 MICRONS OR SMALLER (PM ₁₀)	0.06	55,243	55,243
TOTAL SUSPENDED PARTICULATES (TSP), INCLUDING PM ₁₀	N/A	N/A	N/A
VOLATILE ORGANIC COMPOUNDS (VOCs) ¹	0.6	19,979	19,980
FEDERAL HAZARDOUS AIR POLLUTANTS (LIST EACH ONE SEPARATELY)::			
Note: Values in column ii are taken from the 2013 AEI and			
emissions from additional equipment added during 2014.			

¹ VOCs are defined by EPA at: http://www.epa.gov/ttn/naaqs/ozone/ozonotech/def_voc.htm

Attach detailed calculations to support the figures in the above summary tables. Do not include the emissions from motor vehicles. Include the emissions from stationary sources, portable sources, test areas, experimental facilities, evaporative losses, storage and handling losses, fuel loading and unloading losses, etc. Specifically identify the following in detailed calculations:

- | | |
|--|-------------------------------|
| 1. EMISSIONS FROM EACH POINT SOURCE AND EACH STACK | 4. OVERALL EFFICIENCIES |
| 2. CAPTURE EFFICIENCIES | 5. FUGITIVE EMISSIONS |
| 3. CONTROL EFFICIENCIES | 6. NON-POINT (AREA) EMISSIONS |

For particulate (dust) emissions, describe the types of particulates being emitted and the quantities of emissions for each type. Identify and quantify each and every type of VOC that is included in the above summary tables. Whenever a material is identified by a trade name, also provide its generic name and its chemical abstract service (CAS) number.

Help sheets for calculating emissions from specific industries or processes can be obtained at:
http://www.maricopa.gov/ag/divisions/planning_analysis/emissions_inventory/instructions.aspx

If you need help completing the application package, please see our website or contact 602-506-5102.
<http://www.maricopa.gov/ag/>

FEDERAL HAZARDOUS AIR POLLUTANTS LIST

(Federal Clean Air Act, Title I, Section 112(b))

CAS No.	Chemical name	CAS No.	Chemical name	CAS No.	Chemical name	Chemical name
75070	Acetaldehyde	121667	N,N-Diethyl aniline (N,N-Dimethylaniline)	101687	Methylene diphenyl diisocyanate (MDI)	Antimony Compounds
60355	Acetamide	64675	Diethyl sulfate	101779	4,4'-Methylenedianiline	Arsenic Compounds (Inorganic including arsine)
75058	Acetonitrile	119904	3,3-Dimethoxybenzidine	91203	Naphthalene	Beryllium Compounds
98862	Acetophenone	60117	Dimethyl aminobenzene	98953	Nitrobenzene	Cadmium Compounds
53963	2-Acetylaminofluorene	119937	3,3'-Dimethyl benzidine	92933	4-Nitrophenyl	Chromium Compounds
107028	Acrolein	79447	Dimethyl carbamoyl chloride	100027	4-Nitrophenol	Cobalt Compounds
79061	Acrylamide	68122	Dimethyl formamide	79469	2-Nitropropane	Coke Oven Emissions
79107	Acrylic acid	57147	1,1-Dimethyl hydrazine	684935	N-Nitroso-N-methylurea	Cyanide Compounds[1]
107131	Acrylonitrile	131113	Dimethyl phthalate	62759	N-Nitrosodimethylamine	Glycol ethers[2]
107051	Allyl chloride	77781	Dimethyl sulfate	59892	N-Nitrosomorpholine	Lead Compounds
92671	4-Aminobiphenyl	534521	4,6-Dinitro-o-cresol, and salts	56382	Parathion	Manganese Compounds
62533	Aniline	51285	2,4-Dinitrophenol	82888	Pentachlorophenol	Mercury Compounds
90040	o-Anisidine	121142	2,4-Dinitrotoluene	87865	Pentachloronitrobenzene (Quintobenzene)	Fine mineral fibers[3]
1332214	Asbestos	123911	1,4-Dioxane (1,4-Diethyleneoxide)	108952	Phenol	Nickel Compounds
71432	Benzene (including benzene from gasoline)	122667	1,2-Diphenylhydrazine	106503	p-Phenylenediamine	Polycyclic Organic Matter[4]
92875	Benidine	106898	Epichlorohydrin (1-Chloro-2,3-epoxypropane)	75445	Phosgene	Radionuclides (including radon)[5]
98077	Benzotrithione	106887	1,2-Epoxybutane	7803512	Phosphine	Selenium Compounds
100447	Benzyl chloride	140885	Ethyl acrylate	7723140	Phosphorus	
92524	Biphenyl	100414	Ethyl benzene	85449	Phthalic anhydride	
117817	Bis(2-ethylhexyl)phthalate (DEHP)	51796	Ethyl carbamate (Urethane)	1338363	Polychlorinated biphenyls (Aroclors)	
542881	Bis(chloromethyl)ether	75003	Ethyl chloride (Chloroethane)	1120714	1,3-Propane sultone	
75252	Bromoform	106934	Ethylene dibromide (Dibromoethane)	57578	beta-Propiolactone	
106990	1,3-Butadiene	107082	Ethylene dichloride (1,2-Dichloroethane)	123386	Propionaldehyde	
156627	Calcium cyanamide	107211	Ethylene glycol	114261	Propoxur (Baygon)	
133062	Captan	151564	Ethylene imine (Aziridine)	78875	Propylene dichloride (1,2-Dichloropropane)	
63252	Carbaryl	75218	Ethylene oxide	75369	Propylene oxide	
75150	Carbon disulfide	96437	Ethylene thiourea	75558	1,2-Propylenimine(2-Methyl aziridine)	
58235	Carbon tetrachloride	75343	Ethylene dichloride (1,1-Dichloroethane)	91225	Quinoline	
463581	Carbonyl sulfide	50000	Formaldehyde	106514	Quinone	
120809	Catechol	76448	Heptachlor	100425	Styrene	
33904	Chloramben	118741	Hexachlorobenzene	96093	Styrene oxide	
57749	Chloroform	87683	Hexachlorobutadiene	1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin	
7782505	Chloroform	77474	Hexachlorocyclopentadiene	79345	1,1,2,2-Tetrachloroethane	
79118	Chloroacetic acid	67721	Hexachloroethane	127184	Tetrachloroethylene (Perchloroethylene)	
532274	2-Chloroacetophenone	822060	Hexamethylene-1,6-diisocyanate	7550450	Titanium tetrachloride	
108907	Chlorobenzene	680319	Hexamethylphosphoramide	108883	Toluene	
510156	Chlorobenzilate	110543	Hexane	95807	2,4-Toluene diamine	
67663	Chloroform	302012	Hydrazine	584849	2,4-Toluene diisocyanate	
107302	Chloromethyl methyl ether	7647010	Hydrochloric acid	95334	o-Toluidine	
126998	Chloroprene	7664393	Hydrogen fluoride (Hydrofluoric acid)	8001352	Toxaphene (chlorinated camphene)	
1319773	Cresols/Cresylic acid (isomers and mixture)	123319	Hydroquinone	120821	1,2,4-Trichlorobenzene	
95487	o-Cresol	78591	Isophorone	79005	1,1,2-Trichloroethane	
108394	m-Cresol	58899	Lindane (all isomers)	79016	Trichloroethylene	
108445	p-Cresol	108316	Maleic anhydride	95954	2,4,5-Trichlorophenol	
98828	Cumene	67561	Methanol	88062	2,4,6-Trichlorophenol	
94757	2,4-D, salts and esters	72435	Methoxychlor	121448	Triethylenamine	
3547044	DDE	74839	Methyl bromide (Bromomethane)	1582098	Trifluorin	
334883	Diazomethane	74873	Methyl chloride (Chloromethane)	540841	2,2,4-Trimethylpentane	
132649	Dibenzofurans	71556	Methyl chloroform (1,1,1-Trichloroethane)	108054	Vinyl acetate	
96128	1,2-Dibromo-3-chloropropane	60344	Methyl hydrazine	593602	Vinyl bromide	
84742	Dibutylphthalate	74864	Methyl iodide (Iodomethane)	75014	Vinyl chloride	
106467	1,4-Dichlorobenzene(p)	108101	Methyl isobutyl ketone (Hexone)	75354	Vinylidene chloride (1,1-Dichloroethylene)	
91941	3,3-Dichlorobenzidine	624839	Methyl isocyanate	1330207	Xylenes (isomers and mixture)	
111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)	80626	Methyl methacrylate	95476	o-Xylenes	
542756	1,3-Dichloropropene	1634044	Methyl tert butyl ether	108363	m-Xylenes	
62737	Dichlorvos	101144	4,4-Methylene bis(2-chloroaniline)	106423	p-Xylenes	
111422	Diethanolamine	75092	Methylene chloride (Dichloromethane)			

For all listings above which contain the word "compounds" and for glycol ethers, unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical as part of that chemical's infrastructure.

[1] X'CN where X = H' or any other group where a formal dissociation may occur. For example KCN or Ca(CN)₂.

[2] Includes mono- and di-ethers of ethylene glycol, diethylene glycol and triethylene glycol R(OCH₂CH₂)_n-OR' where:

n = 1, 2 or 3

R = alkyl C7 or less, or phenyl or alkyl substituted phenyl

R' = H, or alkyl C7 or less, or carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate.

[3] Includes mineral fiber emissions from facilities manufacturing or processing glass, rock or slag fibers or other mineral derived fibers of average diameter one (1) micrometer or less.

[4] Includes organic compounds with more than one (1) benzene ring and which have a boiling point greater than or equal to 100°C.

[5] A type of atom which spontaneously undergoes radioactive decay



**Power
Generation**

EPA Tier 4 Interim Exhaust Emission Compliance Statement C150D6R 60 Hz Diesel Generator Set

Compliance Information:

The engine used in this generator set complies with U.S. EPA and California regulations for 2012 Nonroad and Stationary diesel engines. Use in constant-speed applications only. Ultra low sulfur fuel only.

Engine Manufacturer:	Cummins Inc
EPA Certificate Number:	CCEXL06.7AAF-001
Effective Date:	05/05/2011
Date Issued:	05/05/2011
EPA Diesel Engine Family:	CCEXL06.7AAF
CARB Executive Order:	U-R-002-0568

Engine Information:

Model:	Cummins Inc QSB7-G6	Bore:	4.21 in. (107 mm)
Engine Nameplate HP:	314		
Type:	4 Cycle, In Line, 6 Cylinder Diesel	Stroke:	4.88 in. (124 mm)
Aspiration:	Turbocharged, CAC, and EGR	Displacement:	409 cu. in. (6.7 liters)
Compression Ratio:	17.3:1		
Emission Control Device:	Direct Diesel Injection, Variable Geometry Turbocharger, Charge Air Cooler, Electronic Control Module, Cooled Exhaust Gas Recirculation, Diesel Oxidation Catalyst, and Diesel Particulate Filter.		

U.S. Environmental Protection Agency Non Road Engines Tier 4 Interim Limits

(All values are Grams per HP-Hour)

<u>COMPONENT</u>	
NOx (Oxides of Nitrogen)	1.5
CO (Carbon Monoxide)	2.61
PM (Particulate Matter)	0.015
HC (Hydrocarbons)	0.14

Engine operation with excessive air intake or exhaust restriction beyond published maximum limits, or with improper maintenance, may result in elevated emission levels.

Cummins 150 kW C150DR

Emissions Calculations

314 bph – 12.3 gal/hr

CO

$2.61 \text{ g/hp-hr} \times 314 \text{ hp} \times 3 \text{ hr/yr} \times 1 \text{ lb/454 g} \times 2 \text{ GenSets} = 10.8 \text{ lbs CO/yr}$

NOx

$1.5 \text{ g/hp-hr} \times 314 \text{ hp} \times 3 \text{ hr/yr} \times 1 \text{ lb/454 g} \times 2 \text{ GenSets} = 6.2 \text{ lbs NOx/yr}$

SOx

$0.213 \text{ lbs/ Mgal} \times \text{M}/1000 \times 12.3 \text{ gal/hr} \times 3 \text{ hr/yr} \times 2 \text{ GenSets} = 0.02 \text{ lbs SOx/yr}$

PM

$0.015 \text{ g/hp-hr} \times 314 \text{ hp} \times 3 \text{ hr/yr} \times 1 \text{ lb/454 g} \times 2 \text{ GenSets} = 0.06 \text{ lbs PM/yr}$

VOC

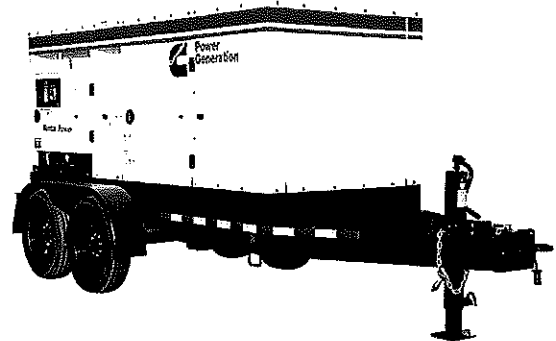
$0.14 \text{ g/hp-hr} \times 314 \text{ hp} \times 3 \text{ hr/yr} \times 1 \text{ lb/454 g} \times 2 \text{ GenSets} = 0.6 \text{ lbs VOC/yr}$

Specification sheet



Rental Power 150 kW

U.S. EPA Tier IV Interim Emissions



Description

This Cummins Power Generation rental package is a fully integrated mobile power generation system, providing optimum performance, reliability, and versatility for standby and prime power applications.

Features

Cummins diesel engines

- Industry leading U.S. EPA Tier 4 Interim compliant Cummins engine
- Advanced electronic engine controls provide superior fuel efficiency and power output while reducing emissions
- High-pressure common rail fuel system reduces engine noise and smoke
- Cummins Direct Flow™ air filtration offering improved air management, longer service life, and easier serviceability
- 2-stage fuel filtration with optimum particle and water separation for longer life engine component protection

Control features

- The most advanced, reliable and capable generator set control system on the market today
- Controls provide precise frequency and voltage regulation, alarm and status message display in one easy to operate customer interface
- Remote monitoring and operation ready
- Auto shutdown at fault detection

Engine controls

- Oil Pressure and Water Temp Gauge
- Fuel Level Gauge & Battery Voltage Gauge
- Hour meter
- Engine control module includes remote start capability

Stamford alternators

- 12-lead reconnectable alternators fitted with voltage selection switch
- Permanent magnet excitation for improved performance in non-linear load applications

Rental package enclosure

- Camlock distribution panel
- Sound attenuated, white powder coated lockable enclosure
- 22 hour fuel tank (100% prime) with gauge
- Roof mounted, single point lift
- Cooling system rated for 118° F (48° C) at 100% SB ambient
- Complete engine fluid containment reservoir
- Voltage selector switch
- Shore power (120 VAC) - No breakers in shore power connection. Shore power loads are coolant heater (option) and battery charger (option). Connection: 15A/120V flanged male receptacle (5-20 flanged inlet).

Model	Voltages (V)	Standby Rating		Prime Rating		Engine model	Alternator model
		60 Hz kW (kVA)	50 Hz kW (kVA)	60 Hz kW (kVA)	50 Hz kW (kVA)		
C150D6R	208/480	150 (188)		135 (169)		QSB7-G6	UCI274F

Our energy working for you.™

©2012 Cummins Power Generation Inc. | NAS-5492-EN (6/12)

cumminspower.com

Engine specifications

Engine model	QSB7-G6
Alternator data sheet	UCI274F (208/480
Tier rating	Tier IV Interim
Design	4 cycle, In-Line, turbocharged and after-cooled
Bore	107 mm (4.21 in.)
Stroke	124.0 mm (4.88 in.)
Displacement	6.69 liters (408 in ³)
Cylinder block	Cast iron, In-Line 6 cylinder
Battery capacity	2 x 750 cca
Battery charging alternator	100 amps
Starting voltage	24 volt, negative ground
Fuel system	Direct injection HPCR system
Fuel filter	Spin on fuel filter with water separator
Air cleaner type	2-stage, dry replaceable element with dust ejector
Lube oil filter type(s)	Single spin-on, full flow
Standard cooling system	118° F (48° C) ambient radiator

Alternator specifications

Design	Brushless, 4 pole, drip proof revolving field
Stator	Double layer concentric, 2/3 winding pitch
Rotor	Singe bearing, flexible disc
Insulation system	Class H per NEMA MG1-1.65 (208/480 VAC)
Standard temperature rise	117/48° C prime (208/480 VAC)
Exciter type	PMG (permanent magnet generator)
Phase rotation	A (U), B (V), C (W)
Alternator cooling	Direct drive centrifugal blower fan
AC waveform total harmonic distortion	< 1.5% no load, < 5% non-distorting balance linear load
Telephone influence factor (TIF)	< 50 per NEMA MG1-22.43
Telephone harmonic factor (THF)	< 2%

Power capability specifications (Assume power factor = 0.80 for 3 phase amps)

	Standby rating			
	240 V, 1 phase Amps	208 V, 3 phase Amps	480 V, 3 phase Amps	240 V, 3 phase Amps
C150D6R	431	520*	226	451

Electrical power panel specifications

Model voltage	120 V duplex receptacles	240 V twist	Load lug connection (stud diameter)	Load lug circuit breakers
120/480 Volt	2 - 20 Amp GFCI	3 - 50 Amp	1/2 inch	600 Amp

Site derating factors

Standby application: The generator may be operated at 1800 rpm up to 2,600 ft (793 m) and 104° F (40° C) without power deration. For sustained operation above these conditions, derate by 5% per 1,000 ft (305 m), and 17% per 18° F (10° C).

Control system

PowerCommand control

- Integrated automatic voltage regulator and engine speed governor
- Control components designed to withstand the vibration levels typical in generator sets

Standard control description

- Cycle cranking control
- Digital display panel
- Idle mode control
- Menu switch
- Panel backlighting
- Reset switch
- Run-off-auto switch
- Self diagnostics

Standard performance data warnings

- High coolant temperature
- High DC voltage
- Low coolant temperature
- Low DC voltage
- Low oil pressure
- Over current
- Weak battery
- Over speed
- Under frequency
- Intake manifold temperature OOR high/low
- Intake manifold temperature high
- Water in fuel OORH/OORL
- General engine fault
- Coolant level OOR high/low

Standard protection functions

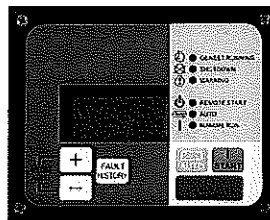
- Warnings
- High coolant temperature
- High DC voltage
- Low coolant temperature
- Low DC voltage
- Low oil pressure
- Over current
- Weak battery

Shutdowns

- Emergency stop local/remote
- Fail to crank
- High AC voltage
- High coolant temperature
- Low coolant level
- Low AC voltage
- Low oil pressure
- Over current
- Over speed
- Under frequency
- Intake manifold temperature high
- Fail to start/stop
- Over frequency
- Alternator reconnecting switch operated (breaker closed)
- High DPF soot level

Agency approvals

- NFPA110 for Levels 1 or 2 systems
- ISO 8528-4: 1993 Compliance, Controls and Switchgear
- CE Marking
- EN 50081-1, 2 Residential/Light Industrial Emissions or Industrial Emissions
- EN 50082-1.2
- ISO 7637-2, Level 2: DC supply surge test
- Mil Std 202C, Method 101 and ASTM B117: Salt Fog Test
- Designed and manufactured in ISO 9001 certified facilities. UL 508 suitable for use on generator sets that are UL 2200 Listed



Standard generator electrical features

- Multiple voltage selector switch (480/277 VAC/3 phase or 240/139 VAC/3 phase or 240/120 VAC/1 phase)
- Adjustable to 208/120 VAC/3 phase
- Single phase convenience receptacles
- Distribution panel with L1, L2, L3 neutral and ground
- Main line shunt trip type circuit breaker
- Auto start-stop with remote contacts
- Over current sensing
- 3 available auxiliary connections

Additional rental package features

- Auxiliary fuel valves for external tank operation
- Tank style coolant heater
- Battery disconnect switch
- Cam lock distribution panel
- 110 Volt, 7 Amp battery charger

Rental package options

- DOT approved electric brake trailer with heavy duty center mounted jack and LED light package
- DOT approved hydraulic brake trailer with heavy duty center mounted jack and LED light package

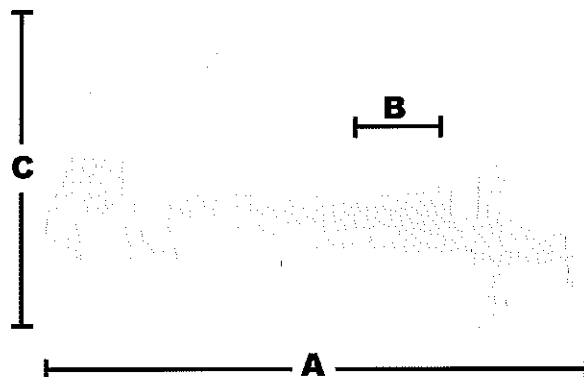
Ratings definitions

Standby:

Applicable for supplying emergency power for the duration of normal power interruption. No sustained overload capability is available for this rating. (Equivalent to Fuel Stop Power in accordance with ISO3046, AS2789, DIN6271 and BS5514). Nominally rated.

Prime (unlimited running time):

Applicable for supplying power in lieu of commercially purchased power. Prime power is the maximum power available at a variable load for an unlimited number of hours. A 10% overload capability is available for limited time. (Equivalent to Prime Power in accordance with ISO8528 and Overload Power in accordance with ISO3046, AS2789, DIN6271, and BS5514).



Dimensions

Model	Dim "A" mm (in.)	Dim "B" mm (in.)	Dim "C" mm (in.)	Weight w/o fuel kg (lbs)	Weight with fuel kg (lbs)	Fuel capacity liters (gal)
C150D6R	3700 (146)	1450 (57)	1700 (67)	2710 (5975)	3531 (7785)	965 (255)
With trailer	5740 (226)	2140 (84)	2309 (91)	3495 (7705)	4316 (9515)	965 (255)

Fuel consumption

60 Hz Ratings, kW (kVA)		Standby 150 (187)				Prime 135 (168)			
		Load	¼	½	¾	Full	¼	½	¾
	US Gal/hr	4.9	7.3	10.0	12.3	4.25	6.75	9.0	11.5
	L/hr	18.5	27.6	37.8	46.5	16.1	25.5	34.0	43.5

Specifications

Model	KW rating		Sound level at full load dB(A) @ 7 m	Tier rating	Hours of operation (75% load)	
	Standby	Prime			Standby	Prime
C150D6R	150	135	75	Tier IV Interim	28	32

Trailer information

Model	Tire size	Tire type	Load range	Number of tires per trailer	Lug pattern
C150D6R	235/85-R16	Radial	2755 lbs - each	4	8 hole

North America
1400 73rd Avenue N.E.
Minneapolis, MN 55432
USA

Phone 763 574 5000
Fax 763 574 5298

Our energy working for you.™

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NAS-5492-EN (6/12)



cumminspower.com



MATERIAL SAFETY DATA SHEET

No. 2 Diesel Fuel

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: No. 2 Diesel Fuel
Synonyms: CARB Diesel TF3; CARB Diesel; CARB Diesel 10%
CARB Diesel Ultra Low Sulfur - Dyed and Undyed
EPA Low Sulfur Diesel Fuel - Dyed and Undyed
EPA Off Road High Sulfur Diesel - Dyed
High Sulfur Diesel Fuel; Low Sulfur Diesel Fuel
No. 2 Diesel Fuel Oil
No. 2 High Sulfur Diesel - Dyed
No. 2 Low Sulfur Diesel - Dyed; No. 2 Low Sulfur Diesel - Undyed
No. 2 Low Sulfur Distillate
No. 2 Ultra Low Sulfur Diesel - Dyed; No. 2 Ultra Low Sulfur Diesel - Undyed
Super Diesel Fuel; Super Diesel Fuel II-LS
Virgin Diesel Fuel; No. 2 Distillate
Super Diesel Fuel; Super Diesel Fuel II-LS
Virgin Diesel Fuel

Intended Use: Fuel
Chemical Family: Petroleum Hydrocarbon

Responsible Party: ConocoPhillips
600 N. Dairy Ashford
Houston, Texas 77079-1175

MSDS Information: 800-762-0942
MSDS@conocophillips.com

Customer Service: 800-527-5476
Technical Information: 800-527-5476

Emergency Overview

24 Hour Emergency Telephone Numbers:

Spill, Leak, Fire or Accident Call CHEMTREC:
North America: (800) 424-9300
Others: (703) 527-3887 (collect)

California Poison Control System: (800) 356-3219

Health Hazards/Precautionary Measures: Causes skin irritation. Aspiration hazard if swallowed. Can enter lungs and cause damage. Use with ventilation adequate to keep exposure below recommended limits, if any. Avoid contact with eyes, skin and clothing. Do not taste or swallow. Wash thoroughly after handling.

Physical Hazards/Precautionary Measures: Flammable liquid and vapor. Keep away from heat, sparks, flames, static electricity or other sources of ignition.

Appearance: Straw colored to dyed red
Physical Form: Liquid
Odor: Diesel fuel

NFPA 704 Hazard Class:

Health: 1 (Slight)
Flammability: 2 (Moderate)
Instability: 0 (Least)

2. COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS					
Component / CAS No:	Concentration (wt %)	ACGIH:	OSHA:	NIOSH:	Other:
Diesel Fuel No. 2 68476-34-6	100	100 mg/m ³ TWA- SKIN	NE	NE	---
Naphthalene 91-20-3	<1	10 ppm TWA 52 mg/m ³ TWA 15 ppm STEL 79 mg/m ³ STEL	10 ppm TWA 50 mg/m ³ TWA	250 ppm IDLH	---

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

1%=10,000 PPM.

NE=Not Established

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye: Contact may cause mild eye irritation including stinging, watering, and redness.

Skin: Mild to moderate skin irritant. Contact may cause redness, itching, burning, and skin damage. Prolonged or repeated contact may cause drying and cracking of the skin, dermatitis (inflammation), burns, and severe skin damage. No harmful effects from skin absorption have been reported.

Inhalation (Breathing): No information available. Studies by other exposure routes suggest a low degree of toxicity by inhalation.

Ingestion (Swallowing): Low degree of toxicity by ingestion. ASPIRATION HAZARD - This material can enter lungs during swallowing or vomiting and cause lung inflammation and damage.

Signs and Symptoms: Effects of overexposure may include irritation of the respiratory tract, irritation of the digestive tract, nausea, diarrhea, transient excitation followed by signs of nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue).

Cancer: There is inadequate information to evaluate the cancer hazard of this material. See Section 11 for information on the individual components, if any.

Target Organs: Inadequate evidence available for this material. See Section 11 for target-organ toxicity information of individual components, if any.

Developmental: Inadequate data available for this material.

Pre-Existing Medical Conditions: Conditions aggravated by exposure may include skin disorders.

4. FIRST AID MEASURES

Eye: If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water. If symptoms persist, seek medical attention.

Skin: Remove contaminated shoes and clothing, and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water. If irritation or redness develops, seek medical attention.

Inhalation (Breathing): If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

Ingestion (Swallowing): Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious and vomiting, place on the left side with the head down. If possible, do not leave victim unattended and observe closely for adequacy of breathing. Seek medical attention.

5. FIRE-FIGHTING MEASURES

Flammable Properties:

Flash Point:	125-180°F / 52-82°C
Test Method:	Pensky-Martens Closed Cup (PMCC), ASTM D93, EPA 1010
OSHA Flammability Class:	Combustible liquid
LEL%:	0.3
UEL%:	10.0
Autoignition Temperature:	500°F / 260°C

Unusual Fire & Explosion Hazards: This material is flammable and can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, or mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe). Vapors may travel considerable distances to a source of ignition where they can ignite, flash back, or explode. May create vapor/air explosion hazard indoors, in confined spaces, outdoors, or in sewers. Vapors are heavier than air and can accumulate in low areas. If container is not properly cooled, it can rupture in the heat of a fire.

Extinguishing Media: Dry chemical, carbon dioxide, or foam is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Water may be ineffective for extinguishment, unless used under favorable conditions by experienced fire fighters.

Fire Fighting Instructions: For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

Isolate immediate hazard area, keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk.

Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

6. ACCIDENTAL RELEASE MEASURES

Flammable. Keep all sources of ignition and hot metal surfaces away from spill/release. The use of explosion-proof electrical equipment is recommended.

Stay upwind and away from spill/release. Notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 8).

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Dike far ahead of spill for later recovery or disposal. Use foam on spills to minimize vapors (see Section 5). Spilled material may be absorbed into an appropriate absorbent material.

Notify fire authorities and appropriate federal, state, and local agencies. Immediate cleanup of any spill is recommended. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, notify the National Response Center (phone number 800-424-8802).

7. HANDLING AND STORAGE

Handling: Open container slowly to relieve any pressure. Bond and ground all equipment when transferring from one vessel to another. Can accumulate static charge by flow or agitation. Can be ignited by static discharge. The use of explosion-proof electrical equipment is recommended and may be required (see appropriate fire codes). Refer to NFPA-704 and/or API RP 2003 for specific bonding/grounding requirements.

Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. The use of appropriate respiratory protection is advised when concentrations exceed any established exposure limits (see Sections 2 and 8).

Do not wear contaminated clothing or shoes. Keep contaminated clothing away from sources of ignition such as sparks or open flames. Use good personal hygiene practices.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

Storage: Keep container(s) tightly closed. Use and store this material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Post area "No Smoking or Open Flame." Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage. Outdoor or detached storage is preferred. Indoor storage should meet OSHA standards and appropriate fire codes.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls: If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits (see Section 2), additional engineering controls may be required. Where explosive mixtures may be present, electrical systems safe for such locations must be used (see appropriate electrical codes).

Personal Protective Equipment (PPE):

Respiratory: A NIOSH certified air purifying respirator with an organic vapor cartridge may be used under conditions where airborne concentrations are expected to exceed exposure limits (see Section 2).

Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a NIOSH approved self-contained breathing apparatus (SCBA) or equivalent operated in a pressure demand or other positive pressure mode if there is potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Skin: The use of gloves impervious to the specific material handled is advised to prevent skin contact, possible irritation, and skin damage. Examples of approved materials are nitrile or Viton® (see glove manufacturer literature for information on permeability). Depending on conditions of use, apron and/or arm covers may be necessary.

Eye/Face: Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended. Depending on conditions of use, a face shield may be necessary.

Other Protective Equipment: Eye wash and quick-drench shower facilities should be available in the work area. Thoroughly clean shoes and wash contaminated clothing before reuse. It is recommended that impervious clothing be worn when skin contact is possible.

Suggestions for the use of specific protective materials are based on readily available published data. Users should check with specific manufacturers to confirm the performance of their products.

9. PHYSICAL AND CHEMICAL PROPERTIES

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Straw colored to dyed red
Physical Form:	Liquid
Odor:	Diesel fuel
Odor Threshold:	No data
pH:	Not applicable
Vapor Pressure (mm Hg):	0.40
Vapor Density (air=1):	> 3
Boiling Point:	300-690°F / 149-366°C
Solubility in Water:	Negligible
Partition Coefficient (n-octanol/water) (Kow):	No data
Specific Gravity:	0.81-0.88@ 60°F (15.6°C)
Bulk Density:	7.08 lbs/gal
Viscosity cSt @ 40°C:	1.7-4.1
Percent Volatile:	Negligible@ ambient conditions
Evaporation Rate (nBuAc=1):	<1
Flash Point:	125-180°F / 52-82°C
Test Method:	Pensky-Martens Closed Cup (PMCC), ASTM D93, EPA 1010
LEL%:	0.3
UEL%:	10.0
Autoignition Temperature:	500°F / 260°C

10. STABILITY AND REACTIVITY

Stability: Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. Flammable liquid and vapor. Vapor can cause flash fire.

Conditions to Avoid: Avoid all possible sources of ignition (see Sections 5 and 7).

Materials to Avoid (Incompatible Materials): Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite, etc.

Hazardous Decomposition Products: Combustion can yield carbon, nitrogen and sulfur oxides. The use of hydrocarbon fuel in an area without adequate ventilation may result in hazardous levels of combustion products (e.g., oxides of carbon, sulfur and nitrogen, benzene and other hydrocarbons) and/or dangerously low oxygen levels. See Section 11 for additional information on hazards of engine exhaust. IARC has classified Diesel exhaust as probably carcinogenic in humans.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Chronic Data:

Diesel Fuel No. 2 (68476-34-6)

Carcinogenicity: Petroleum middle distillates have been shown to cause skin tumors in mice following repeated and prolonged skin contact. Follow-up studies have shown that these tumors are produced through a non-genotoxic mechanism associated with frequent cell damage and repair, and that they are not likely to cause tumors in the absence of prolonged skin irritation. Animal studies have also shown that washing the skin with soap and water can reduce the tumor response. Middle distillates with low polynuclear aromatic hydrocarbon content have not been identified as a carcinogen by NTP, IARC or OSHA.

Target Organs: Limited evidence of renal impairment has been noted from a few older case reports involving excessive exposure to diesel fuel No. 2. However, renal toxicity has not been demonstrated to be a consistent finding of diesel fuel exposure.

Naphthalene (91-20-3)

Carcinogenicity: Naphthalene has been evaluated in two year inhalation studies in both rats and mice. The National Toxicology Program (NTP) concluded that there is clear evidence of carcinogenicity in male and female rats based on increased incidences of respiratory epithelial adenomas and olfactory epithelial neuroblastomas of the nose. NTP found some evidence of carcinogenicity in female mice (alveolar adenomas) and no evidence of carcinogenicity in male mice. Naphthalene has been identified as a carcinogen by IARC and NTP.

Acute Data:**Diesel Fuel No. 2 (68476-34-6)***Dermal LD50= >5ml/kg (Rabbit)**LC50= No data available**Oral LD50= 9 ml/kg (Rat)***Naphthalene (91-20-3)***Dermal LD50= >2.5 g/kg (rat)**LC50= >340 mg/m³/1H (rat)**Oral LD50= 490 mg/kg; 2.6 g/kg (rat)*

12. ECOLOGICAL INFORMATION

When middle distillate hydrocarbons escape into the environment due to leaks or spills, most of their constituent hydrocarbons will evaporate and be photodegraded by reaction with hydroxyl radicals in the atmosphere. The half-lives in air for many of the individual hydrocarbons is less than one day. Less volatile hydrocarbons can persist in the aqueous environment for longer periods. They remain floating on the surface of the water; those that reach soil or sediment biodegrade relatively slowly. Soil contaminated with middle distillates can develop adapted microbial species able to use the fuel as a carbon source; soil aeration and nutrient supplementation can enhance this biodegradation.

Reported LC50/EC50 values for water-soluble fractions of middle distillates are usually in the range of 10 to 100 mg/liter. Adverse effects on the gills, pseudobranch, kidney and nasal mucosa have been reported in fish involved in spills of middle distillates. Juvenile clams may be particularly sensitive to marine sediments contaminated as a result of spilled material. Direct toxicity and fouling of sea birds can occur if birds dive through floating layers of spilled material.

Phytotoxic effects of middle distillate hydrocarbons have been reported following exposure of plants to sprays or vapors. Lack of seed germination and inhibition of seedling growth may also occur. There is evidence for moderate bioaccumulation of the water-soluble hydrocarbons present in middle distillates.

13. DISPOSAL CONSIDERATIONS

This material, if discarded as produced, is not a RCRA "listed" hazardous waste. However, it should be fully characterized for ignitability (D001) and benzene (D018) prior to disposal (40 CFR 261). Use which results in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult state and local regulations regarding the proper disposal of this material.

Container contents should be completely used and containers should be emptied prior to discard. Container rinsate could be considered a RCRA hazardous waste and must be disposed of with care and in full compliance with federal, state and local regulations. Larger empty containers, such as drums, should be returned to the distributor or to a drum reconditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

14. TRANSPORT INFORMATION

DOT**Shipping Description:** Diesel Fuel, Combustible liquid, NA1993, III**Non-Bulk Package Marking:** Not regulated in non-bulk quantities**Non-Bulk Package Labeling:** Not regulated in non-bulk quantities**Bulk Package/Placard Marking:** Combustible/1993**Packaging - References (Exceptions, Non-Bulk, Bulk):** 49 CFR 173.150(f), 173.203, 173.241**Hazardous Substance:** None**Emergency Response Guide:** 128**Note:** This product has been reclassified as a Combustible Liquid for domestic land transportation using 49 CFR 173.150(f).**IMDG****Shipping Description:** UN1202, Diesel fuel, 3, III (52°C)**Non-Bulk Package Marking:** Diesel fuel, UN1202

14. TRANSPORT INFORMATION

Labels: Flammable

Placards/Marking (Bulk): Flammable/1202

Packaging - Non-Bulk: P001, LP01

EMS: F-E, S-E

ICAO/IATA

UN/ID #: UN1202

Proper Shipping Name: Diesel fuel

Hazard Class/Division: 3

Packing Group: III

Subsidiary risk: None

Non-Bulk Package Marking: Diesel fuel, UN1202

Labels: Flammable

	LTD. QTY.	Passenger Aircraft	Cargo Aircraft Only
Packaging Instruction #:	Y309	309	310
Max. Net Qty. Per Package:	10 L	60 L	220 L

15. REGULATORY INFORMATION**U.S. Regulations:****EPA SARA 311/312 (Title III Hazard Categories)**

Acute Health: Yes

Chronic Health: No

Fire Hazard: Yes

Pressure Hazard: No

Reactive Hazard: No

SARA - Section 313 and 40 CFR 372:

This material contains the following chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372:

Naphthalene.....91-20-3.....<1%

EPA (CERCLA) Reportable Quantity (in pounds):

EPA's Petroleum Exclusion applies to this material - (CERCLA 101(14)).

CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs (in pounds):

This material contains the following chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372:

-- None Known --

California Proposition 65:

Warning: This material contains the following chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm, and are subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):

Benzene -- Cancer, Developmental and Reproductive Toxicant

Naphthalene -- Cancer

Toluene -- Developmental Toxicant

Diesel engine exhaust, while not a component of this material, is on the Proposition 65 list of chemicals known to the State of California to cause cancer.

Carcinogen Identification:

This material has not been identified as a carcinogen by NTP, IARC, or OSHA. See Section 11 for carcinogenicity information of individual components, if any.

Diesel exhaust is a probable cancer hazard based on tests in laboratory animals. It has been identified as a carcinogen by IARC.

TSCA:

All components are listed on the TSCA inventory.

International Regulations:**Canadian Regulations:**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Domestic Substances List: Listed

WHMIS Hazard Class:

B2 - Flammable Liquids

D2B - Materials Causing Other Toxic Effects - Toxic Material

16. OTHER INFORMATION

Issue Date:	21-Feb-2006
Previous Issue Date:	13-Feb-2003
Product Code:	Multiple
Previous Product Code:	Multiple
Revised Sections or Basis for Revision:	Product Name / Synonyms (Section 1)
MSDS Code:	001847

Disclaimer of Expressed and implied Warranties:

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**AIR QUALITY
Department**



RECEIPT #: AQ14007691

TRANSACTION DATE: 10/16/2014

TRACKING #: AQ14004500

TYPE: Air Quality Fees

SITE ADDRESS:

PARCEL:

PERMIT NUMBER/APPLICATION ID #: 030132-404912

PROJECT NAME: PALO NUCLEAR GENERATING STATIO

APPLICANT NAME: PALO VERDE NUCLEAR GENERATING STATION

TRANSACTION AMOUNT:200.00

NOTATION:

TRANSACTION LIST

Type	Method	Description	Amount
Payment	Credit C		200.00

RECEIPT ACCOUNT ITEM LIST

Item#	Description	Account Code	Tot Fee	Paid	Prv. Pmts	Cur. Pmts
7110	Non-V/Gen Engin	504-852-8550	200.00	200.00	.00	200.00

BALANCE DUE: \$0.00